UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,341	04/07/2004	Edwin Riley Cooper	5011-1005	8149

73552   7590   10/13/2010

Stolowitz Ford Cowger LLP
621 SW Morrison St
Suite 600
Portland, OR 97205

EXAMINER
ADESANYA, OLUJIMI A

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
10/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
	10/820,341	COOPER ET AL.
Office Action Summary	Examiner	Art Unit
	OLUJIMI A. ADESANYA	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 July 2010</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>23-30 and 32-63</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>23-30 and 32-63</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Request for Continued Examination

2.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

7/28/2010 has been entered.

Response to Arguments

3.   Applicant's arguments filed 7/28/2010 have been fully considered but they are

not persuasive.

        As per applicant's arguments regarding claim 23, applicant argues that Mekikian

does not teach or suggest limitations <u>the rules engine configured to perform a second</u>

<u>comparison of peripheral information distinct from the content of the query to a second</u>

<u>different condition of at least one rule from the rules dictionary</u>" and "<u>the rules engine</u>

<u>configured to selectively enable an action based on a result of the first comparison and</u>

<u>a result of the second comparison</u>" (Amendment, pg 11, ln 10 – pg 12, ln 9). The

examiner respectfully disagrees.

Mekikian discloses a rules engine to receive the elements and the annotations, the

rules engine configured to perform a <u>first</u> comparison of a <u>first</u> condition of <u>at least one</u>

rule from a rules dictionary against the elements and the annotations (pg 16, ln 10 – pg

17, ln 8; After all elements in the question have been matched, the sentences are

sorted... sorted sentence list, a decision is made..., if the answer quality...is high...., if

several of the top...have close scores..., pg 25, ln 10-29; fig 3, if..., as rules, score of

answers as conditions; if the answer quality...is high....displayed alone, if several of the

top...have close scores...they can all be displayed, pg 25, ln 10-29 display options as

actions).

Mekikian further suggests performing <u>a second comparison of peripheral</u>

<u>information distinct from the content of the query (name, IP address in user profile) to a</u>

<u>second different condition of at least one rule from the rules dictionary</u> (pg 25, ln 10-29;

application develops user profile...generates a log...that includes.....identity of the user

(name, IP address...)....the next time the user....enters another query....updated profile

is used....., pg 29, ln 24 - pg 31, ln 15; display options as actions, By utilizing peripheral

information obtained from the user during a previous visit, and comparing it to

information stored in the database, the system retrieves information for the user based

on a match between the user's name/IP address and the stored information about the

user, during a subsequent visit by the same). Mekikian further discloses <u>the rules</u>

<u>engine configured to selectively enable an action based on a result of the first</u>

<u>comparison and a result of the second comparison</u> (if the answer quality...is

high....displayed alone, if several of the top...have close scores...they can all be

displayed, pg 25, ln 10-29; pg 29, ln 24 - pg 31, ln 15, display options as actions).

Therefore the examiner maintains that Mekikian teaches/suggests the limitations.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

5.   Claims 44-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. In particular, the claims recite "an article of

manufacture……" there is no disclosure of this limitation (article of manufacture) in the

specifications.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 44-54 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. **Claim 44 is** drawn to a "An article of

manufacture including a computer readable medium…." with the specification being

silent to any description of the storage/readable medium and as such is non- statutory

subject matter. See MPEP § 2106.1V.B.1.a. The broadest reasonable interpretation of a

claim drawn to a computer readable medium (also called machine readable/storage

medium and other such variations) typically covers forms of non-transitory tangible

media and transitory propagating signals per se in view of the ordinary and customary

meaning of computer readable media, particularly when the specification is silent. See

MPEP 2111.01, and as such is rejected under 35 U.S.C. § 101 as covering non-

statutory subject matter. A claim drawn to such a computer readable medium that

covers both transitory and non-transitory embodiments may be amended to narrow the

claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by

adding the limitation "non-transitory" to the storage medium in the claim.

Claim Rejections - 35 USC § 103

7.   **Claims 23, 25, 32-34, 39, 42 and 43** are rejected under 35 U.S.C. 103(a) as

being unpatentable over Mekikian et al WO 2001/0188662 A2 ("Mekikian")

        As to **claim 23**, Mekikian discloses a system comprising:

        a language analysis module configured to parse <u>content of</u> a query into elements

(receiving segments....e.g. sentences, each segment having elements.., pg 5, ln 20-25;

matching elements in a question with elements in an index file..., pg 6, ln 18-20, fig 1-3

elements as portions of parsed query) and

        to associate one or more annotations with respective ones of at least some of the

elements, a type of each of the annotations being either canonical or conceptual (fig 1,

element 34; "what are the ski conditions like in Aspen?".....generate TAGS...for Aspen,

such as "ski rental"...Flying to Aspen", pg 28, ln 20-27, Aspen as element associated

with the TAGS/annotations);

a rules engine coupled to the language analysis module to receive the elements

and the annotations, the rules engine configured to perform a <u>first</u> comparison of a <u>first</u>

condition of <u>at least one</u> rule from a rules dictionary against the elements and the

annotations (pg 16, ln 10 – pg 17, ln 8; After all elements in the question have been

matched, the sentences are sorted... sorted sentence list, a decision is made..., if the

answer quality...is high...., if several of the top...have close scores..., pg 25, ln 10-29;

fig 3, if..., as rules, score of answers as conditions; if the answer quality...is

high....displayed alone, if several of the top...have close scores...they can all be

displayed, pg 25, ln 10-29 display options as actions);

Mekikian suggests:

<u>the rules engine configured to perform a second comparison of peripheral</u>

<u>information distinct from the content of the query to a second different condition of at</u>

<u>least one rule from the rules dictionary</u> (fig 9; After all elements in the question have

been matched, the sentences are sorted... sorted sentence list, a decision is made..., if

the answer quality...is high...., if several of the top...have close scores..., pg 25, ln 10-

29; fig 3, if the answer quality...is high....displayed alone, if several of the top...have

close scores...they can all be displayed, pg 25, ln 10-29; application develops user

profile...generates a log...that includes.....identity of the user (name, IP

address...)....the next time the user....enters another query....updated profile is

used….., pg 29, In 24 - pg 31, In 15; if…, as rules, display options as actions, identity of

the user as information distinct from the query that is compared to previous session of

the user, By utilizing peripheral information obtained from the user during a previous

visit, and comparing it to information stored in the database, the system retrieves

information for the user based on a match between the user's name/IP address and the

stored information about the user, during a subsequent visit by the same);

the rules engine configured to selectively enable an action based on a result of the

first comparison and a result of the second comparison (if the answer quality…is

high….displayed alone, if several of the top...have close scores...they can all be

displayed, pg 25, In 10-29; pg 29, In 24 - pg 31, In 15, display options as actions); and

a response generator coupled to the rules engine and configured to display

information in response to the action (display, pg 25, In 10-29; fig 11-14 as a way of

producing information); and

wherein the action when enabled selects one of one or more information retrieval

technologies to produce the information, and wherein the selected information retrieval

technology is configured to search content storage via a semantic index to produce at

least a portion of the information (matching of elements in a question with elements in

an index file…, displayed, pg 6, In 18-24; if the answer quality…is high….displayed

alone, if several of the top...have close scores...they can all be displayed, pg 25, In 10-

29, display options as actions).

At the time of the invention, it would have been obvious to one of ordinary skill in

the art to implement performing "a second comparison of peripheral information distinct

from the content of the query to a second different condition of at least one rule from the

rules dictionary", so as to personalize information that would be retrieved to the user

during a subsequent visit to the information provider (pg 29, ln 24 - pg 31, ln 15).

As to **claim 25**, Mekikian discloses the system of claim 23, wherein the action

specifies one or more of the elements and the annotations as keys used to access the

semantic index (matching of elements in a question with elements in an index file...,

displayed, pg 6, ln 18-24).

As to **claim 31**, Mekikian discloses the system of claim 23,

Mekikian does not explicitly disclose but suggests selectively enabling an action

based on comparing peripheral information distinct from a query against a business

condition of a rule (business, log includes...identification of the user...questions

asked...log is analyzed to generate pre-defined reports..., pg 30, ln 26 - pg 31, ln 15; fig

10, log as peripheral information)

At the time of the invention, it would have been obvious to one of ordinary skill in

the art to utilize a method/system wherein the rules engine is further configured to

selectively enable an action based on comparing peripheral information distinct from a

query against a business condition of a rule, so as to generate reports specific to a

corporation or an individual.

As to **claim 32**, Mekikian discloses the system of claim 23, wherein the language

analysis module is further configured to process the content storage to form the

semantic index (fig 2).

As to **claim 33**, Mekikian discloses a method comprising:

searching, by a computer, content storage using a key to a semantic index (matching

of elements in a question with elements in an index file…, displayed, pg 6, ln 18-24;

"LATEST Aspen news, Traveling in Aspen…." These TAGS are then used to extract

appropriate information from information sources…., pg 29, ln 14-22; pg 15, ln 1-5, ln

22-29);

prior to the searching of the content storage;

parsing content of a received query into elements (receiving segments….e.g.

sentences, each segment having elements.., pg 5, ln 20-25; matching elements in a

question with elements in an index file…, pg 6, ln 18-20, elements as portions of parsed

query)

associating one or more annotations with respective ones of at least some of the

elements ("what are the ski conditions like in Aspen?"…generate TAGS…for Aspen,

such as "ski rental"…Flying to Aspen", pg 28, ln 20-27, Aspen as element associated

with the TAGS/annotations);

comparing a respective first condition of at least one rule from a rules dictionary

against the elements and the annotations (pg 16, ln 10 – pg 17, ln 8; After all elements

in the question have been matched, the sentences are sorted… sorted sentence list, a

decision is made…, if the answer quality…is high…., if several of the top…have close

scores…, pg 25, ln 10-29; fig 3, if…, as rules, score of answers as conditions; if the

answer quality…is high….displayed alone, if several of the top…have close

scores…they can all be displayed, pg 25, ln 10-29);

Mekikian suggests:

comparing a second condition of at least one rule from the rules dictionary against

peripheral information distinct from the content of the query (fig 9; After all elements in

the question have been matched, the sentences are sorted… sorted sentence list, a

decision is made…, if the answer quality…is high…., if several of the top…have close

scores…, pg 25, ln 10-29; fig 3, if the answer quality…is high….displayed alone, if

several of the top…have close scores…they can all be displayed, pg 25, ln 10-29;

application develops user profile…generates a log…that includes…..identity of the user

(name, IP address…)….the next time the user….enters another query….updated profile

is used….., pg 29, ln 24 - pg 31, ln 15; if…, as rules, display options as actions, identity

of the user as information distinct from the query that is compared to previous session

of the user);

selectively firing at least one action of at least one of the rules from the rules

dictionary based on results of the comparisons (if the answer quality…is

high….displayed alone, if several of the top…have close scores…they can all be

displayed, pg 25, ln 10-29; pg 29, ln 24 - pg 31, ln 15, display options as actions);

matching, by at least one of the rules, a plurality of the elements and the

annotations to a concept representing an intent of the query, wherein each of the

plurality of the elements and the annotations corresponds to one or more words of the

query content (generate ad TAGS, "what are the ski conditions like in

Aspen?"...generate TAGS...for Aspen…the ads are presented…along with the answer

to the question, pg 28, ln 20 – pg 29, ln 2; by "element"…, we mean a concept...in the

sentence, pg 15, ln 6-8),

and wherein the concept is used as the key to the semantic index used in the

searching of the content storage (matching of elements in a question with elements in

an index file…, displayed, pg 6, ln 18-24; "LATEST Aspen news, Traveling in Aspen…."

These TAGS are then used to extract appropriate information from information

sources…., pg 29, ln 14-22; pg 15, ln 1-5, ln 22-29):

in response to the selective firing, operating one or more information retrieval

technologies to produce respective information (display, pg 25, ln 10-29, as a way of

producing information);

wherein the one or more information retrieval technologies include the searching of the

content storage ("LATEST Aspen news, Traveling in Aspen…." These TAGS are then

used to extract appropriate information from information sources…., pg 29, ln 14-22; pg

15, ln 1-5, ln 22-29); and

displaying the produced information (These TAGS are then used to extract

appropriate information from information sources….,page …presented to the user….,

pg 29, ln 14-22; pg 15, ln 1-5, ln 22-29.

At the time of the invention, it would have been obvious to one of ordinary skill in

the art to implement performing "a second comparison of peripheral information distinct

from the content of the query to a second different condition of at least one rule from the

rules dictionary", so as to personalize information that would be retrieved to the user

during a subsequent visit to the information provider (pg 29, ln 24 - pg 31, ln 15).

As to **claim 34**, Mekikian discloses the method of claim 33, wherein the matching

is via a regular expression language (language, pg 31, ln 28 – pg 32, ln 6).

As to **claim 39**, Mekikian discloses the method of claim 33, wherein the comparing is via a regular expression language (language, pg 31, ln 28 – pg 32, ln 6).

As to **claim 42**, Mekikian discloses the method of claim 33,

<u>wherein selectively firing at least one action comprises selectively firing a plurality of actions </u>(if the answer quality…is high….displayed alone…..they can all be displayed….bias can be applied to cause the display….., pg 25, ln 14-29); further comprising:

determining a respective relevancy of each of at least some of the firing actions and selectively performing each of the at least some of the firing actions based upon the respective relevancy (if the answer quality…is high….displayed alone, if several of the top...have close scores...they can all be displayed, pg 25, ln 10-29, score as relevancy).

As to **claim 43**, Mekikian discloses the method of claim 42, wherein the respective relevancy of a particular one of the firing actions is based on the ones of the elements and the annotations that contributed to the respective results of the comparing that selectively fired the particular firing action (if the answer quality…is high….displayed alone, if several of the top...have close scores...they can all be displayed, pg 25, ln 10-29, score as relevancy).

As to **claim 44**, Mekikian discloses an article of manufacture including a computer readable medium

article of manufacture claim 44 and method claim 33 are related as article of manufacture and the method of using same, with each claimed element's function

corresponding to the claimed method step. Accordingly claim 44 is similarly rejected under the same rationale as applied above with respect to method claim 33.

As to **claim 45**, Mekikian discloses the article of manufacture of claim 44,

Computer readable medium claim 45 and method claim 34 are related as computer readable medium and the method of using same, with each claimed element's function corresponding to the claimed method step. Accordingly claim 45 is similarly rejected under the same rationale as applied above with respect to method claim 34.

As to **claim 50**, Mekikian discloses the article of manufacture of claim 44,

article of manufacture claim 50 and method claim 39 are related as computer readable medium and the method of using same, with each claimed element's function corresponding to the claimed method step. Accordingly claim 50 is similarly rejected under the same rationale as applied above with respect to method claim 3.

As to **claim 53**, Mekikian discloses the article of manufacture of claim 44,

article of manufacture claim 53 and method claim 42 are related as computer readable medium and the method of using same, with each claimed element's function corresponding to the claimed method step. Accordingly claim 53 is similarly rejected under the same rationale as applied above with respect to method claim 42.

As to **claim 54**, Mekikian discloses the article of manufacture of claim 53,

article of manufacture claim 54 and method claim 43 are related as article of manufacture and the method of using same, with each claimed element's function corresponding to the claimed method step. Accordingly claim 54 is similarly rejected under the same rationale as applied above with respect to method claim 43.

As to **claim 55**, Mekikian discloses the method of claim 33, further comprising:

prior to receiving the query, establishing the content storage during an indexing

mode by importing structured content and/or unstructured content into the content

storage (sentences, Article, index file, index numbers, pg 12, ln 24 - pg 13; pg 14, ln 22-

27);

using the actions selectively fired by the rules to define a search criteria including

the concept and using the search criteria when searching the content storage as at least

a part of the one or more information retrieval technologies (matching of elements in a

question with elements in an index file..., displayed, pg 6, ln 18-24; if the answer

quality...is high....displayed alone, if several of the top...have close scores...they can all

be displayed, pg 25, ln 10-29, display options as actions; LATEST Aspen news,

Traveling in Aspen...." These TAGS are then used to extract appropriate information

from information sources...., pg 29, ln 14-22; pg 15, ln 1-5, ln 22-29).

As to **claim 56**, Mekikian discloses the method of claim 33, further comprising:

specifying weightings via the actions selectively fired by the rules (if the answer

quality...is high....displayed alone, if several of the top...have close scores...they can all

be displayed, pg 25, ln 10-29, display options as actions, scores as weightings);

determining relevance to the query of individual documents in the information

according to the weightings (quality of the answer..., pg 25, ln 11-29);

displaying the documents according to the relevance (top of the scoring..., pg 25, ln

11-29); and

wherein the rules identify both the concept representing the intent of the query to be

addressed in the information and the weightings determining the relevance of the

documents in the information (if the answer quality...is high....displayed alone, if several

of the top...have close scores...they can all be displayed, pg 25, ln 10-29, display

options as actions).

As to **claim 57**, Mekikian discloses the method of claim 33, wherein the one or

more information retrieval technologies include one or more of keyword searching,

document-level relevance-based searching, and ontology-based searching (relevant

documents...., pg 26, ln 1-11).

As to **claim 58**, Mekikian discloses the system of claim 23, wherein the peripheral

information includes data from a particular user profile that is preset prior to generation

of the query (application develops user profile...generates a log...that

includes.....identity of the user (name, IP address...)....the next time the user....enters

another query....updated profile is used....., pg 29, ln 24 - pg 31, ln 15).

As to **claim 59**, Mekikian discloses the system of claim 58, wherein the user profile

specifies prior queries submitted by a respective user of the particular user profile

(application develops user profile...generates a log...that includes.....identity of the user

(name, IP address...)....the next time the user....enters another query....updated profile

is used....., pg 29, ln 24 - pg 31, ln 15).

As to **claim 60**, Mekikian discloses the system of claim 23,

Mekikian does not explicitly disclose but suggests wherein the peripheral

information includes a time that the query was initiated (application develops user

profile...generates a log...that includes.....identity of the user (name, IP

address...)....the next time the user....enters another query....updated profile is used....., pg 29, In 24 - pg 31, In 15, log as suggesting time).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement "wherein the peripheral information includes a time that the query was initiated", so as to personalize information that would be retrieved to the user during a subsequent visit to the information provider based on information from the earlier visit (pg 29, In 24 - pg 31, In 15).

As to **claim 61**, Mekikian discloses the system of claim 23, wherein the peripheral information includes session information or web page information (application develops user profile...generates a log...that includes.....identity of the user (name, IP address...)....the next time the user....enters another query....updated profile is used....., pg 29, In 24 - pg 31, In 15).

As to **claim 62**, Mekikian discloses the system of claim 23, wherein the rules engine is configured to perform the second comparison prior to performing the first comparison (fig 9; After all elements in the question have been matched, the sentences are sorted... sorted sentence list, a decision is made..., if the answer quality...is high...., if several of the top...have close scores..., pg 25, In 10-29; fig 3, if the answer quality...is high....displayed alone, if several of the top...have close scores...they can all be displayed, pg 25, In 10-29; application develops user profile...generates a log...that includes.....identity of the user (name, IP address...)....the next time the user....enters another query....updated profile is used....., pg 29, In 24 - pg 31, In 15; if..., as rules,

display options as actions, identity of the user as information distinct from the query that

is compared to previous session of the user).

As to **claim 63**, Mekikian discloses the system of claim 62, wherein the rules engine

is configured to bypass the first comparison conditionally according to the result of the

second comparison, and if the first comparison is bypassed, selectively enable the

action based only on the result of the second comparison (application develops user

profile...generates a log...that includes.....identity of the user (name, IP

address...)....the next time the user....enters another query....updated profile is used to

personalize web pages and advertising for the user, pg 29, ln 24 - pg 31, ln 15).

5.   **Claims 24, 26-30, 35-38, 40-41, 46-49 and 51-52** are rejected under 35 U.S.C.

103(a) as being unpatentable over Mekikian et al WO 2001/0188662 A2 ("Mekikian") in

view of Lin et al US 6,675,159 B1 ("Lin")

As to **claim 24**, Mekikian discloses the system of claim 23,

Mekikian does not explicitly disclose matching ones of the elements against

concepts stored in a multi-layered concept repository to produce the conceptual

annotations (col. 9, ln 55-65; col. 27, ln 1-22).

However, this feature is well known as is evidenced by **Lin** (transforms input

sentences into...tagged instances of concepts..., col. 9, ln 55-65; ontology, col. 8, ln 51-

55; parent concept, col. 27, ln 1-22; col. 26, ln 42-62)

At the time of the invention it would have been obvious to one of ordinary skill in the

art to implement matching ones of the elements against concepts stored in a multi-

layered concept repository to produce the conceptual annotations, so as to show the relation of the element to other concepts (Lin, col. 27, ln 1-14).

As to **claim 26**, Mekikian discloses the system of claim 23, and wherein the action specifies the concept as a key used to access the semantic index (matching of elements in a question with elements in an index file…, displayed, pg 6, ln 18-24).

Mekikian does not explicitly disclose associating via a regular expression language specifying the condition of the rule, a plurality of the elements and the annotations with a concept in a multi-layered concept repository

However, this feature is well known as is evidenced by **Lin** (transforms input sentences into…tagged instances of concepts…, col. 9, ln 55-65; ontology, col. 8, ln 51-55; parent concept, col. 27, ln 1-22; col. 26, ln 42-62)

At the time of the invention it would have been obvious to one of ordinary skill in the art to implement associating via a regular expression language specifying the condition of the rule, a plurality of the elements and the annotations with a concept in a multi-layered concept repository, so as to show the relation of the element to other concepts (Lin, col. 27, ln 1-14).

As to **claim 27**, Mekikian in view of Lin disclose the system of claim 26,

Mekikian discloses wherein each of the rules <u>of the rules dictionary has at least one</u> respective condition and <u>at least one</u> respective action (After all elements in the question have been matched, the sentences are sorted… sorted sentence list, a decision is made…, if the answer quality…is high….displayed alone, if several of the

top...have close scores...they can all be displayed, pg 25, ln 10-29, if..., as rules, score

of answers as conditions, display as action); and

the selected information retrieval technology is a first selected information retrieval

technology, and the at least a portion of the produced information is an initial first

portion of the produced information ("what are the ski conditions like in

Aspen?"...generate TAGS...for Aspen, such as "ski rental"...Flying to Aspen", pg 28, ln

20-27; if the answer quality...is high....displayed alone, pg 25, ln 14-29); and

a second one of the actions when enabled selects a second distinct one of the

information retrieval technologies, and the second selected information retrieval

technology is configured to supply a managed answer as a subsequent second portion

of the produced information (if several of the top...have close scores...they can all be

displayed, pg 25, ln 14-29; generate pre-defined reports..., pg 30, ln 26-pg 31).

As to **claim 28**, Mekikian in view of Lin disclose the system of claim 27,

Mekikian discloses wherein a third one of the actions when enabled provides a bias

requirement, and wherein the response generator is configured to selectively display the

produced information based on the bias requirement (bias can be applied to cause the

display...., pg 25, ln 14-29)

As to **claim 29**, Mekikian in view of Lin disclose the system of claim 28 and the

response generator,

Mekikian does not explicitly disclose but suggests wherein the response generator

is configured to display the initial portion of the produced information in a first portion of

a screen, and to display a subsequent portion of the produced information in a second

separate portion of the screen (that sentence could be displayed alone...they can all be

displayed...bias can be applied to cause the display of high-scoring sentences...., pg

25, In 14-29)

At the time of the invention, it would have been obvious to one of ordinary skill in the

art to display a first portion of the information in a first portion of a screen, and to display

a second portion of the information in a second separate portion of the screen, so as to

differentiate between the documents/sentences returned by the response generator.

As to **claim 30**, Mekikian in view of Lin disclose the system of claim 27,

Mekikian discloses wherein the managed answer is specified via the one of the

rules having the second action (pg 25, In 14-29; generate pre-defined reports..., pg 30,

In 26-pg 31)

As to **claim 35**, Mekikian discloses the method of claim 34, and the rule examples

Mekikian does not explicitly disclose wherein the matching determines if at least

one of the plurality of the elements and the annotations shares a common ancestor in a

multi-layered concept repository with a question example from the rules dictionary

However, this feature is well known as is evidenced by **Lin** (transforms input

sentences into...tagged instances of concepts..., col. 9, In 55-65; ontology, col. 8, In 51-

55; parent concept, col. 27, In 1-22; col. 26, In 42-62)

At the time of the invention it would have been obvious to one of ordinary skill in the

art to implement matching which determines if at least one of the plurality of the

elements and the annotations shares a common ancestor in a multi-layered concept

repository with a question example of the at least one of the rules, so as to show the

relation of the element to other concepts (Lin, col. 27, ln 1-14).

As to **claim 36**, Mekikian in view of Lin disclose the method of claim 35,

Mekikian discloses wherein the one of the information retrieval technologies is a first

one of the information retrieval technologies, <u>wherein selectively firing at least one</u>

<u>action comprises selectively firing a plurality of actions, the method</u> further comprising

in response to a first one of the firing actions, operating the first information retrieval

technology (if the answer quality…is high….displayed alone, pg 25, ln 14-29);

in response to a second one of the firing actions, operating a second distinct one of

the information retrieval technologies (if several of the top...have close scores...they can

all be displayed, pg 25, ln 14-29); and

providing, via the second one of the information retrieval technologies, a managed

answer (pg 25, ln 14-29; generate pre-defined reports…, pg 30, ln 26-pg 31).

As to **claim 37**, Mekikian in view of Lin disclose the method of claim 36,

Mekikian discloses wherein the displaying of the <u>produced</u> information is selectively

based on at least some of the firing actions (matching of elements in a question with

elements in an index file…, displayed, pg 6, ln 18-24).

As to **claim 38**, Mekikian in view of Lin disclose the method of claim 37,

Mekikian discloses wherein the displaying of the <u>produced</u> information is selectively

based on the bias requirement (pg 25, ln 14-29; generate pre-defined reports…, pg 30,

ln 26-pg 31; bias can be applied to cause the display…., pg 25, ln 14-29).

As to **claim 40**, Mekikian discloses the method of claim 39,

Mekikian does not explicitly disclose wherein the associating is, at least in part, via a multi-layered concept repository producing conceptual ones of the annotations

However, this feature is well known as is evidenced by **Lin** (transforms input sentences into…tagged instances of concepts…, col. 9, ln 55-65; ontology, col. 8, ln 51-55; parent concept, col. 27, ln 1-22; col. 26, ln 42-62)

At the time of the invention it would have been obvious to one of ordinary skill in the art to perform the associating at least in part, via a multi-layered concept repository producing conceptual ones of the annotations, so as to show the relation of the element to other concepts

As to **claim 41**, Mekikian in view of Lin disclose the method of claim 40,

wherein selectively firing at least one action comprises selectively firing a plurality of actions(if the answer quality…is high….displayed alone…..they can all be displayed….bias can be applied to cause the display….., pg 25, ln 14-29);

Mekikian discloses wherein at least one of the firing actions specifies one or more of the elements and the annotations as additional keys used for the searching of the content storage (matching of elements in a question with elements in an index file…, displayed, pg 6, ln 18-24).

As to **claim 46**, Mekikian discloses the article of manufacture of claim 45,

article of manufacture claim 46 and method claim 35 are related as article of manufacture and the method of using same, with each claimed element's function corresponding to the claimed method step. Accordingly claim 46 is similarly rejected under the same rationale as applied above with respect to method claim 35.

As to **claim 47**, Mekikian in view of Lin discloses the article of manufacture of claim 46,

article of manufacture claim 47 and method claim 36 are related as article of manufacture and the method of using same, with each claimed element's function corresponding to the claimed method step. Accordingly claim 47 is similarly rejected under the same rationale as applied above with respect to method claim 36.

As to **claim 48**, Mekikian in view of Lin discloses the article of manufacture of claim 47,

article of manufacture claim 48 and method claim 37 are related as article of manufacture and the method of using same, with each claimed element's function corresponding to the claimed method step. Accordingly claim 48 is similarly rejected under the same rationale as applied above with respect to method claim 37.

As to **claim 49**, Mekikian in view of Lin discloses the article of manufacture of claim 48, wherein the operations further comprise providing, via at least some of the firing actions, a bias requirement, and wherein the displaying of the produced information is selectively based on the bias requirement (pg 25, ln 14-29; generate pre-defined reports…, pg 30, ln 26-pg 31; bias can be applied to cause the display…., pg 25, ln 14-29).

As to **claim 51**, Mekikian in view of Lin discloses the article of manufacture of claim 50,

article of manufacture claim 51 and method claim 40 are related as computer readable medium and the method of using same, with each claimed element's function

corresponding to the claimed method step. Accordingly claim 51 is similarly rejected

under the same rationale as applied above with respect to method claim 40.

As to **claim 52**, Mekikian in view of Lin discloses the article of manufacture of claim

51,

article of manufacture claim 52 and method claim 41 are related as article of

manufacture and the method of using same, with each claimed element's function

corresponding to the claimed method step. Accordingly claim 52 is similarly rejected

under the same rationale as applied above with respect to method claim 41.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to OLUJIMI A. ADESANYA whose telephone number is

(571)270-3307. The examiner can normally be reached on Monday-Friday 7.30a.m -

5.00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OLUJIMI A ADESANYA/
Examiner, Art Unit 2626

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626